36 S(14 C, 13 C),(18 O, 17 O γ) 1984Ma49

History

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Full Evaluation John Cameron, Jun Chen and Balraj Singh, Ninel Nica NDS 113, 365 (2012)

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1984Ma49: $E(^{14}C)=71$ MeV, $E(^{18}O)=80$ MeV; target 80% enriched; measured ^{13}C and ^{17}O particle spectra, $E\gamma$, $^{17}O-\gamma$ coin, Q3D magnetic spectrograph.

³⁷S Levels

E(level)[†] Comments $\sigma = 40.0 \text{ mb/sr at } 10^{\circ} \text{ in } (^{14}\text{C}, ^{13}\text{C}).$ E(level): from $(^{18}\text{O}, ^{17}\text{O}\gamma)$. Other: 662 15 in $(^{14}\text{C}, ^{13}\text{C})$.

[†] Group of prominent unresolved levels near 5 MeV excitation is seen in (¹⁴C, ¹³C) reaction.

$$\gamma(^{37}S)$$

$$\frac{{\rm E}_{\gamma}^{\dagger}}{{}^{x}616^{\ddagger}}$$
 $\frac{{\rm E}_{i}({\rm level})}{647 \ 3}$ $\frac{{\rm E}_{f}}{647 \ 3}$ $\frac{{\rm E}_{f}}{647 \ 3}$ $\frac{{\rm E}_{f}}{647 \ 3}$

[†] From $\gamma(^{17}\text{O})$ coin in $(^{18}\text{O},^{17}\text{O}\gamma)$.

[‡] Connected with deexcitation of unresolved group of levels near 5 MeV.

 x γ ray not placed in level scheme.

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Level Scheme

